

Draft National Model EMS Evidence-based Guidelines Development Process

System Inputs

1. External evidence synthesis processes, e.g., Cochrane systematic reviews, EPCs
2. Externally developed protocols, e.g., from existing systems – Nova Scotia
3. Prehospital components of externally developed guidelines, e.g., AHA, NAEMSP, BTF, NICE, NZGG
4. Scope of practice & national EMS education standards
5. Individual researchers, medical directors & providers
6. Academic institutions

EMS Evidence Accumulation, Evaluation & GL Initiation

1. Accept proposals for GL topics
 2. Identify existing systematic reviews.
 3. Recommend need for or conduct systematic review
- * COI/Disclosure required for all participants, including submitters

Establish Priorities For GL Development

1. Evaluate quality of evidence and guidelines, e.g. AGREE
2. Recommend topics for further GL development
3. Archive material not selected for further development

Guideline Development

1. Document risks & benefits of intervention. First do no harm.
2. Develop strength of recommendation, e.g., GRADE
3. Document rationale for “no recommendation”; disseminate.
4. EMS “contextualization”
5. Write or endorse guideline
6. Provide feedback to originating institution or organization

Model EMS Protocol Development

1. EMS “contextualization”
2. Clinical implications of strength of recommendation

Evaluation of Effectiveness, Outcomes/ Clinical Research QI Evaluations

1. GL/protocol pilot testing/feasibility studies (may occur during development process)
2. Monitor local QI benchmarks & indicators, QI processes at all levels
3. Apply NEMSIS data in evaluation process.
4. Outcomes research: EMSOP – local, regional statewide, national
5. Clinical research of specific questions
6. Systems research (See EMSOP II & IV)
7. Cost effectiveness, cost-utility analyses, cost-benefit (See EMSCAP papers)
8. Implementation research – analysis of barriers & facilitators to implementation

Implementation

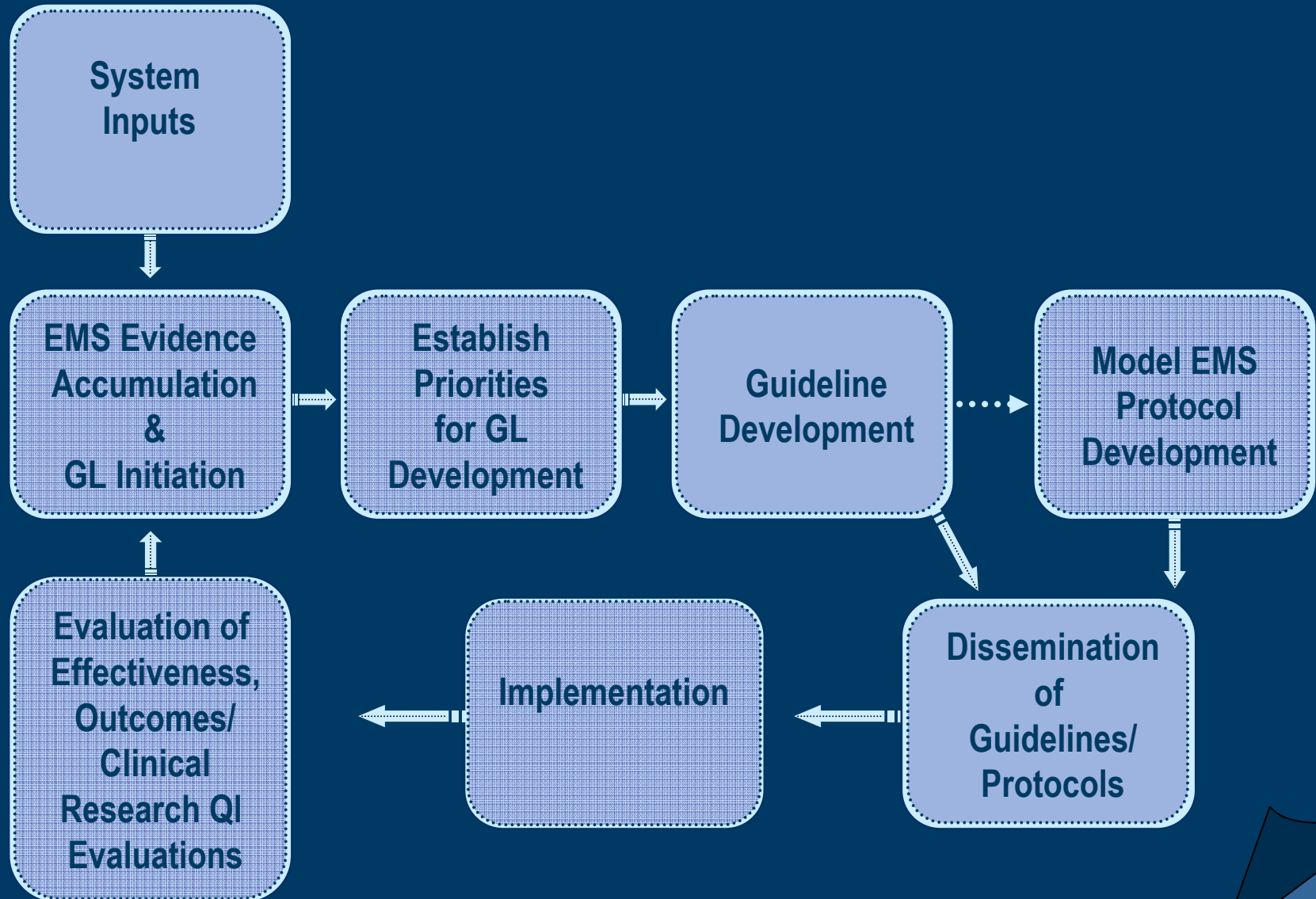
1. Linked to National EMS Provider Certification/ Recertification
2. Linked to National EMS Agency accreditation
3. Development of GL implementation “tool kits,” webinars, manuals, integration in local protocols
4. Partnerships with national orgs. to facilitate interpretation, application & medical direction.
5. Potentially linked to funding and reimbursement, e.g., CMS, 3rd party
6. Development of health informatics & clinical decision support software.
7. Develop QI measures & tools – local, regional, state & tribal

Dissemination of Guidelines/Protocols

1. Linked to EMS Education Agenda for the Future → Core Content → Scope of Practice Model → National EMS Education Standards
2. Linked to National EMS Education Program Accreditation
3. Publications: peer-reviewed journals, trade press, textbooks, govt. reports.
4. New products: educational materials, QI improvement materials
5. Target stakeholder organizations
6. Multimedia approach: ems.gov, podcasts, etc.

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EMS Evidence-based Guideline Development Process



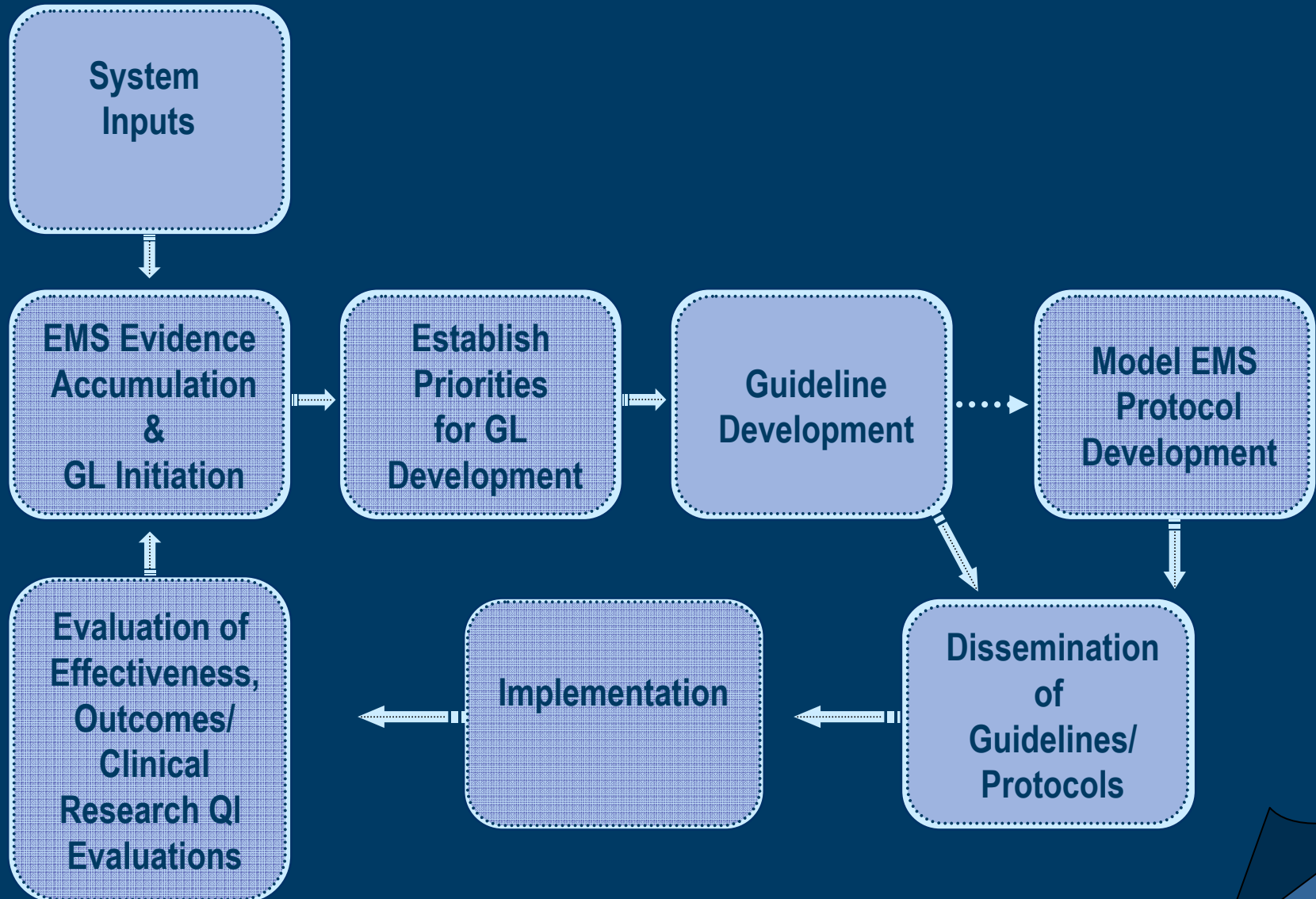
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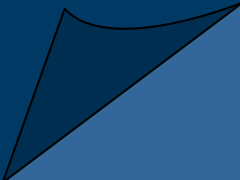
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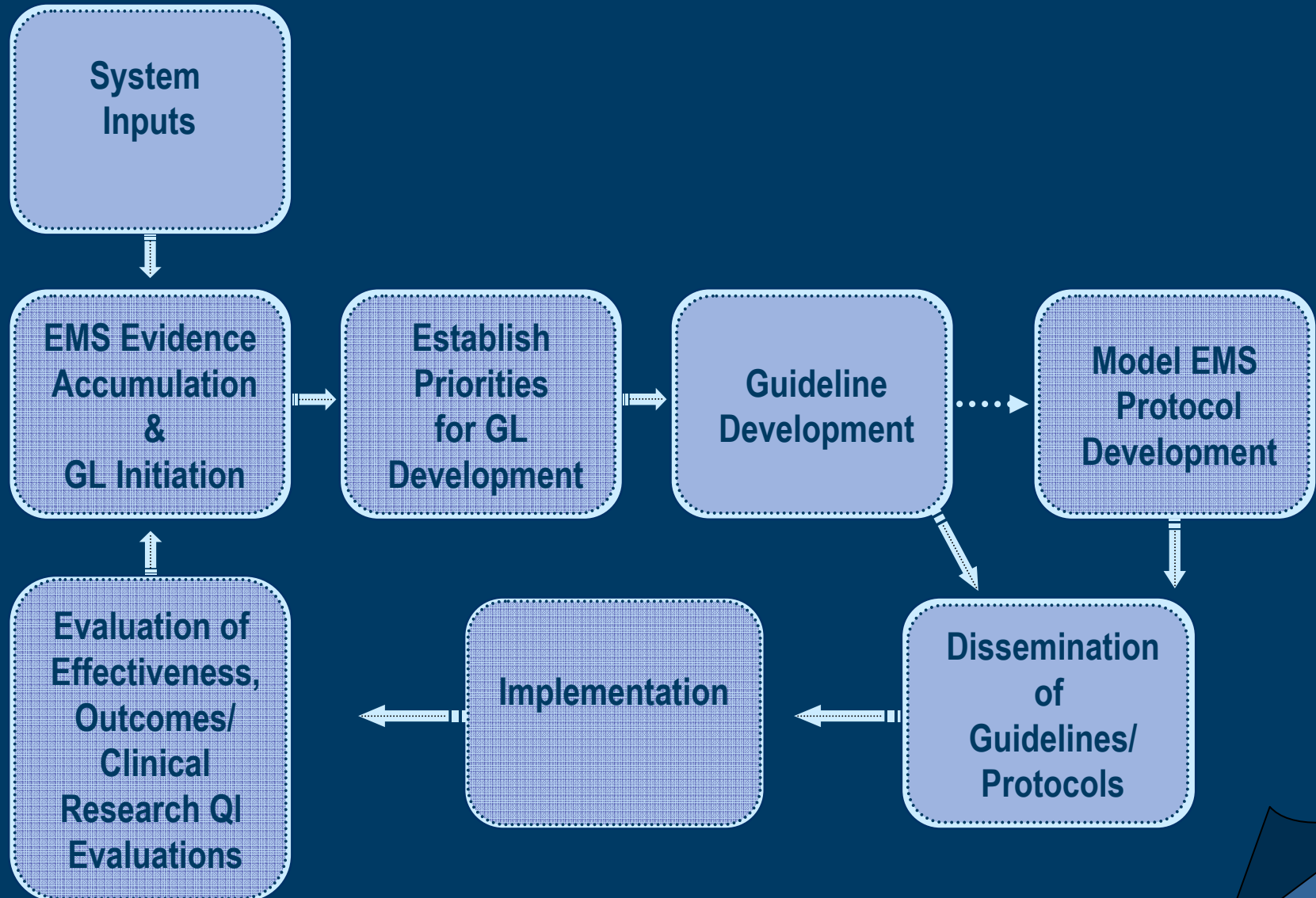


EMS Evidence Accumulation, Evaluation & GL Initiation

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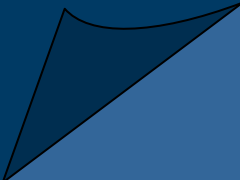
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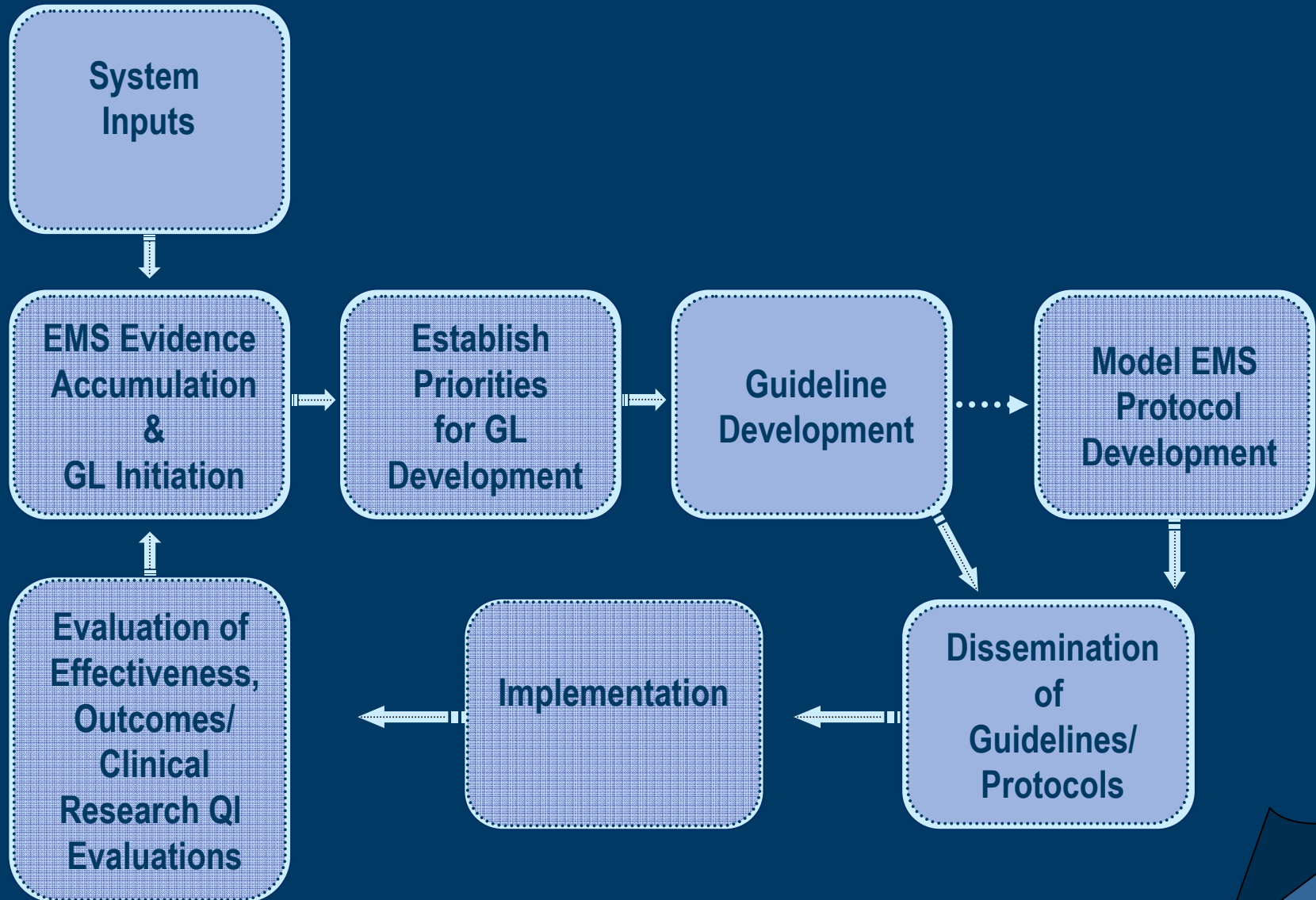


Establish Priorities for GL Development




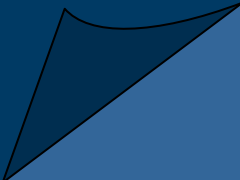
- **Evaluate quality of evidence supporting extant GLs (e.g., AGREE methodology)**
 - **Evaluate evidence for potential guidelines**
 - **Recommend topics for further GL development**
 - **Archive material not selected for reference and future development**
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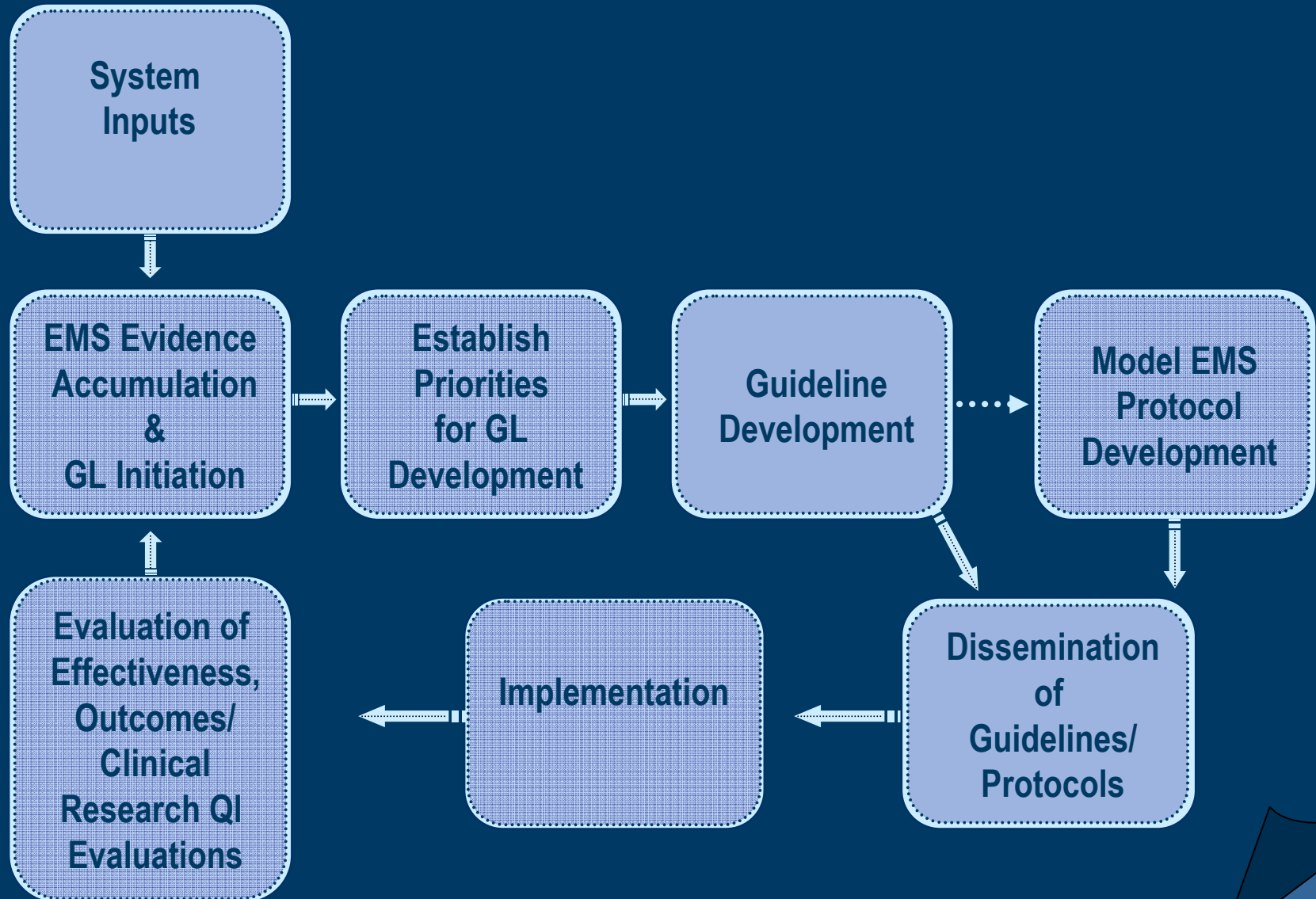


Guideline Development

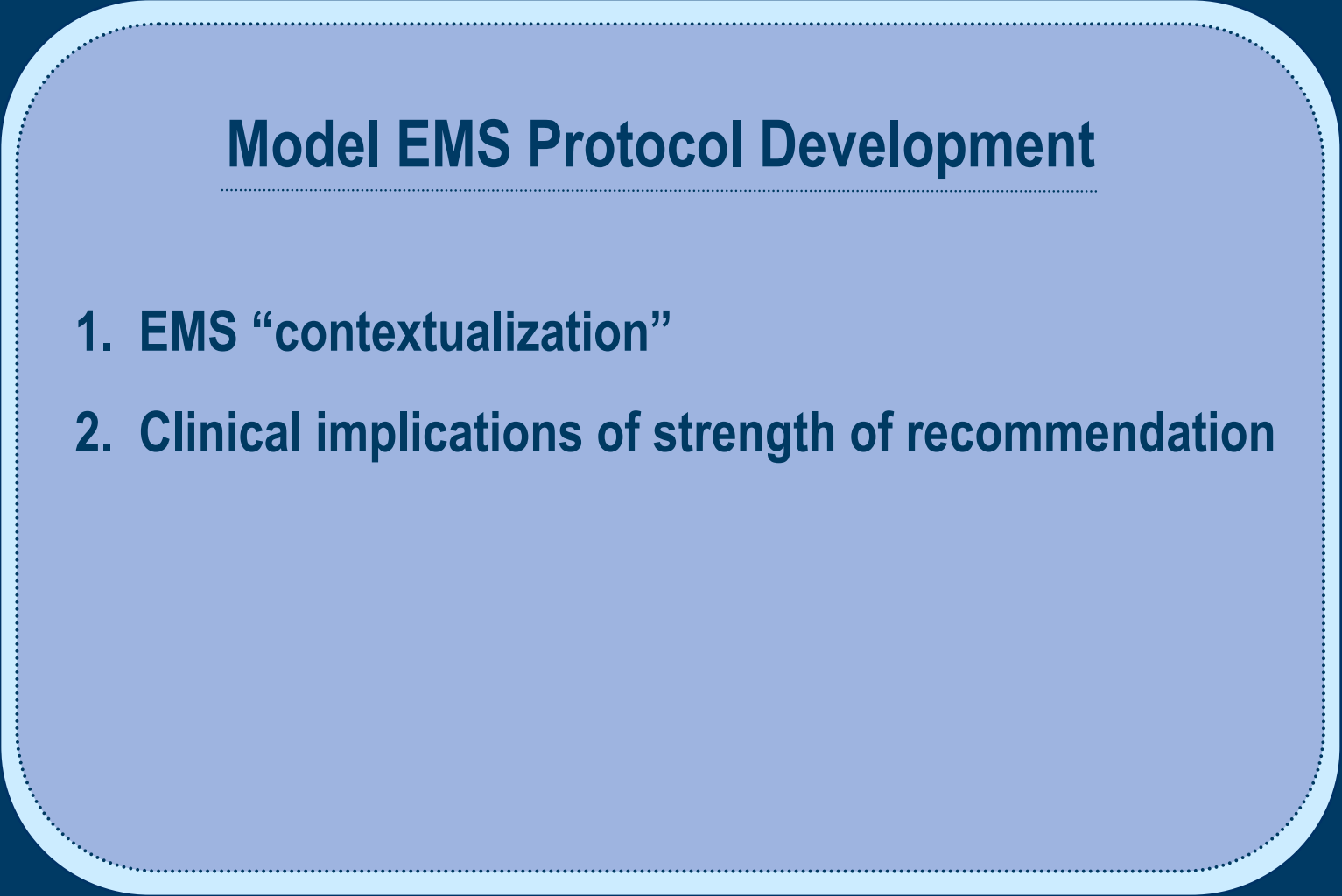
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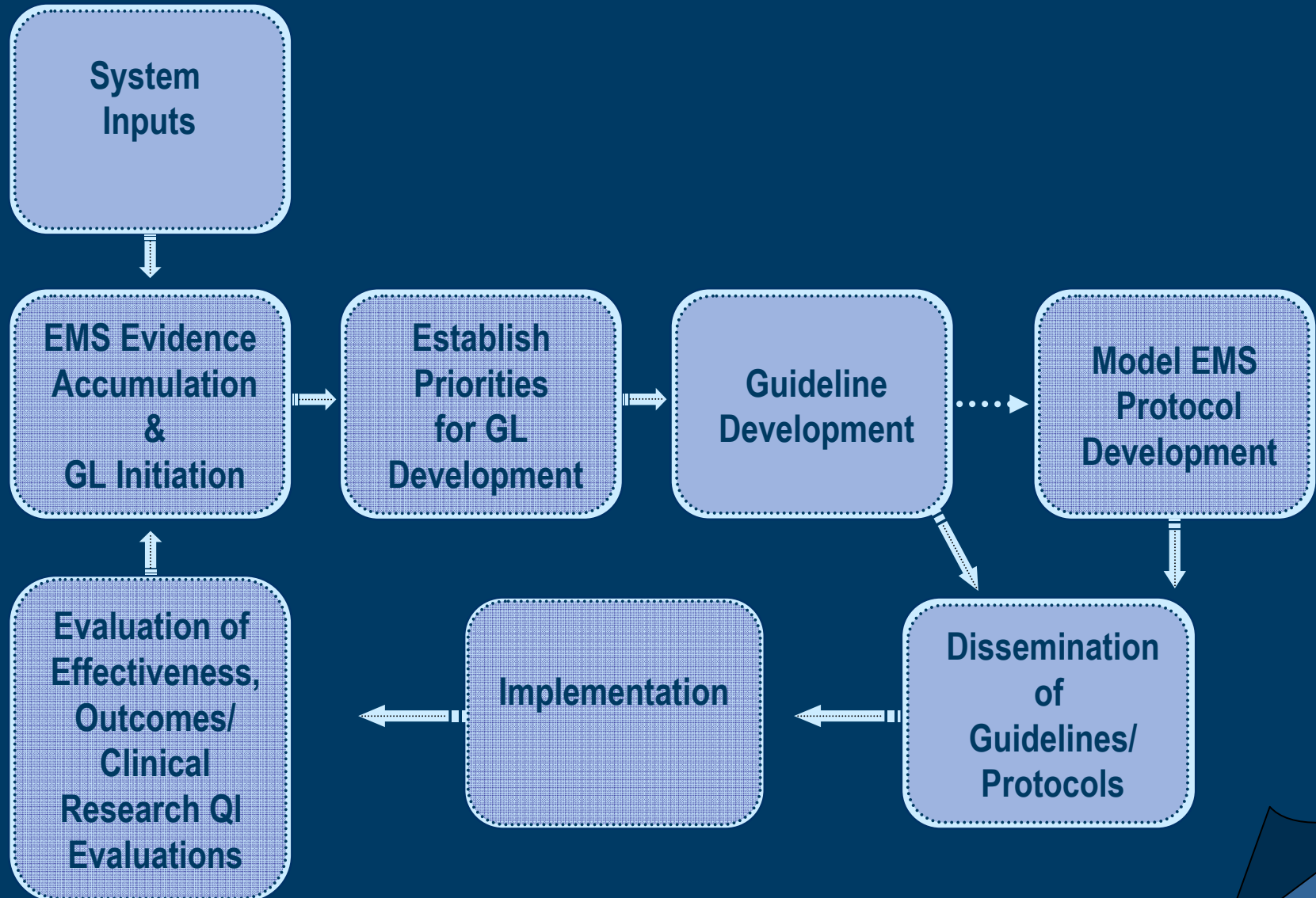


Model EMS Protocol Development

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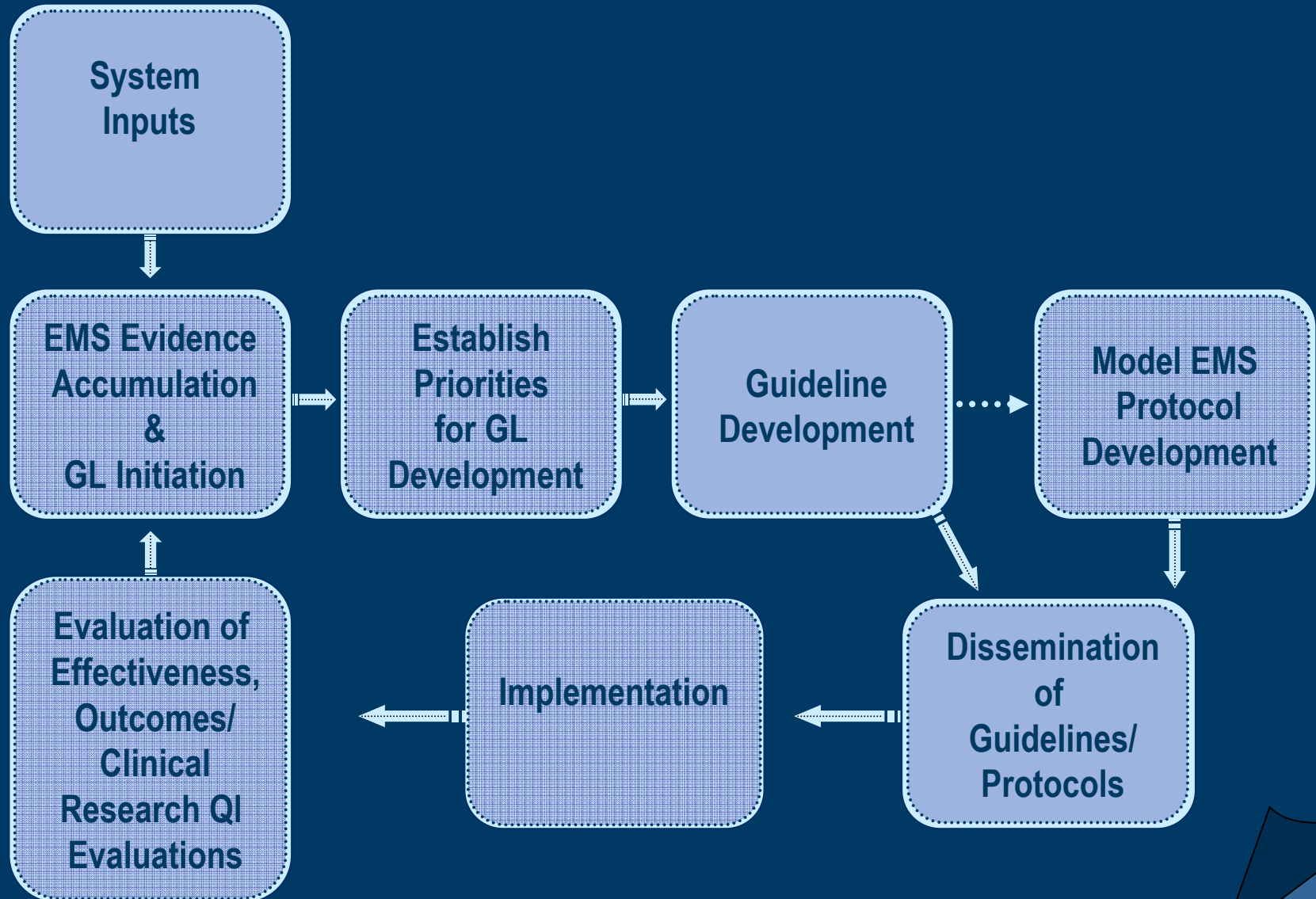
The diagram features a dark blue background. At the top, two white arrows point downwards towards a central light blue box. On the left side, a white arrow points horizontally towards the same box. The central box has a white border and rounded corners. Inside the box, the title 'Dissemination of Guidelines/Protocols' is centered at the top, followed by a list of six items. In the bottom right corner of the slide, there is a small graphic of a folded corner.

Dissemination of Guidelines/Protocols

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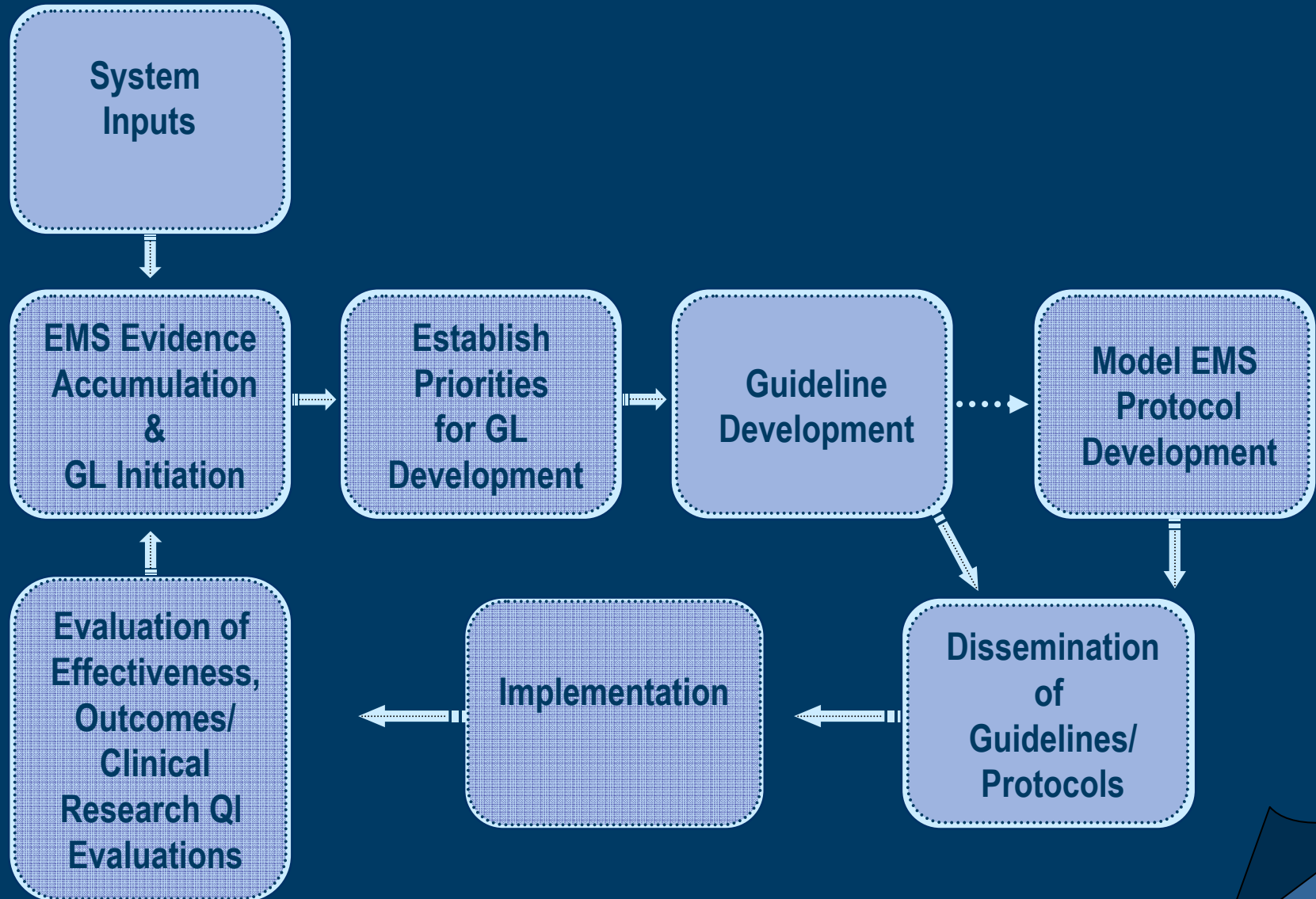


Implementation

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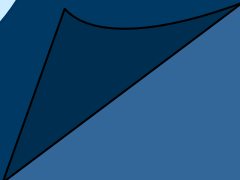
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Building the National Model

Where do we go from here?

■ **Overall goal**

- Well-defined, consistent national system for the development and dissemination of prehospital EMS evidence-based guidelines
 - Integrated with National EMS Scope of Practice Model, National EMS Education Standards
 - Integrated into practice
 - Coordinated with Federal/national priorities
- Method of achieving goal is still “fluid”

Building the National Model

Where do we go from here?

- **Solicit input**
 - SAEM
 - NEMSAC & FICEMS (June, 2009)
 - Discussion of model
 - Explore ways to increase stakeholder involvement
 - Modify draft model
 - Initiate development of long-term strategy
 - Early conversations with other Federal partners

Building the National Model

Where do we go from here?

- **Disseminating the draft model**
 - Professional organizations
 - Presentations
 - Peer-reviewed literature
 - EMS trade publications
 - Publish proceedings of September 2008 conference

Building the National Model

Where do we go from here?

■ **Research**

- Beta-test
 - New guideline/protocol development
 - Components of the model
 - Implementation strategies
 - Assessing the “model” and providing feedback
- Do the guidelines make a difference in outcome?

Building the National Model

Where do we go from here?

■ **Implementation**

- Evaluate lessons learned
- Define ongoing, sustainable and consistent system
 - Coordinated Federal and national effort
- Integrate into practice of new EMS personnel
 - Modification of national EMS scope of practice model
 - Modification of national EMS education standards
- Integration into practice of existing EMS personnel
 - Coordination with continuing education requirements of national EMS certification

Building the National Model

Where do we go from here?

■ **Implementation**

- Financial sustainability
 - Federal incentives
 - Grants
 - Guidance language
 - Additional research
 - Private funding
 - Other alternatives
- Explore other long-term strategies for organization and funding